CIHR IRSC
Instituts de recherche en santé du Canada

Fall 2005

Your Health Research Dollars at Work

An Update from the Canadian Institutes of Health Research

Health research equals health improvement

It's simple: health research equals health improvement.

Getting there is more complex: you need time, effort and resources.

You also need hope. Terry Fox personified this message with his "Marathon of Hope". To possess hope is to have optimism that something can be done. To abandon hope is to stop searching for answers.

In health research, our hope is achieving results. Our research is being translated into new treatments and approaches to health care which are, in turn, improving health. According to a 2004 Ekos poll, 90 per cent of Canadians agreed that research contributes to an improved and sustainable health care system.

Health research is not only the foundation of health, it also contributes to a more prosperous Canada. Money allocated to CIHR for funding health research is part of a Government of Canada strategy encouraging the growth of a productive, knowledge-based economy.

By focusing CIHR's investments on strategic health priorities (e.g. wait times, Aboriginal health, obesity and cancer, to name but a few) we have built an umbrella for Canada's broad health research needs. Many provinces and research agencies have already aligned their research investments with these priorities. This approach stimulates innovation and maximizes the use of scarce research dollars.

We are at a critical point. If we make the right investments, we will continue to progress, improving health care and building an innovative and productive economy through the commercialization of research. Bold, far-sighted investments in health research are essential to nurture hope, attract and keep the very best research talent and support a high quality, evidence-based, sustainable health care system for Canadians. Or, to quote Mary Lasker, the great American philanthropist who established the U.S.' most prestigious prize – the Lasker Awards – in health research (awarded this year to two Canadian researchers Drs. E.A. McCulloch and J.E. Till): "If you think research is expensive, try disease."

Dr. Alan Bernstein, O.C., FRSC
President, Canadian Institutes of Health Research

NATIONAL UPDATE

Canadian Health Research Talent

Cancer Pioneers Win "America's Nobel Prize"

Drs. Ernest McCulloch (left) and James Till.

Drs. James Till and Ernest McCulloch of the Ontario Cancer Institute and the University of Toronto, respectively, received the prestigious 2005 Albert Lasker Award on Sept. 23 in New York City. The U.S. award is considered to be 'America's Nobel Prize' and is one of the most distinguished scientific honours given for outstanding contributions to health research and public service.

"The Albert Lasker Award recognizes world-leading scientists who have made an exceptional contribution to the understanding, diagnosis, prevention and treatment of diseases," said federal Health Minister Ujjal Dosanjh.

"This prestigious award highlights the great work of both scientists and recognizes Canada's contribution to the international scientific community," added federal Industry Minister David Emerson.

Drs. Till and McCulloch are being honoured for their groundbreaking discovery in the early 1960s, demonstrating the existence of stem cells in the blood-forming system. Their discovery laid the foundation for human bone marrow transplantation for patients with leukemia and other cancers.

"Drs. Till and McCulloch motivated me as a young scientist – and continue to influence an entire generation of Canadian health researchers," said CIHR President Dr. Alan Bernstein, a former student of Dr. Till at the University of Toronto and the Ontario Cancer Institute.

About the Canadian Institutes of Health Research

The Canadian Institutes of Health Research is the Government of Canada's agency for health research. Its objective is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system. Composed of 13 Institutes, CIHR provides leadership and support to close to 10,000 researchers and trainees in every province of Canada.

Canada

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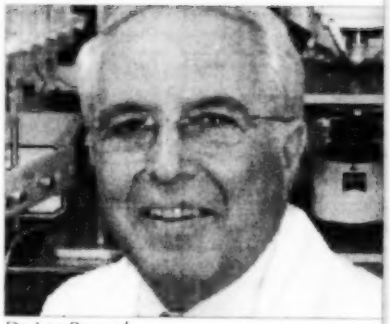
ONTARIO

University of Ottawa Awards New Research Chair

Ottawa: Dr. Leo Renaud, Associate Director and Senior Scientist at the Ottawa Health Research Institute, will focus on neurological and psychiatric disorders as the first Dr. J. David Grimes Research Chair. CIHR, the University of Ottawa, the Ottawa Health Research Institute and GlaxoSmithKline Inc. partnered to fund the $2-million Grimes Chair. This position will explore brain cell function to advance the understanding and treatment of neurological and psychiatric disorders such as Parkinson's disease, epilepsy, schizophrenia and depression. Brain disorders are a leading cause of disability and death and represent 14% of the total economic burden of health costs in the country.


Dr. Leo Renaud

University of Toronto Study Charts Origins of Fear

Toronto: A team of researchers led by Dr. Min Zhuo at the University of Toronto has charted how and where a painful event becomes permanently etched in the brain – a discovery that could potentially create therapeutic ways to ease emotional pain in people. The University of Toronto Innovations Foundation is currently working with Dr. Zhuo to help translate this finding into treatments. CIHR and the U.S. National Institutes of Health were among the funders.

SASKATCHEWAN

Researcher Wins New Investigator Award

Regina: The University of Saskatchewan's Dr. Yu Luo has received a CIHR New Investigator Award, given to Canada's brightest young health researchers at the beginning of their careers. Dr. Luo, an Assistant Professor in the Department of Biochemistry, studies *recombinases* – enzymes essential for gene repair that have been linked to breast cancer when they go awry. Antibiotics can also work with these enzymes to release toxins. Dr. Luo's work at the Canadian Light Source synchrotron has high potential payoff for improving cancer treatment and preventing complications from antibiotics.

Dr. Yu Luo

BRITISH COLUMBIA

BC Sees 167% Increase in Health Research Funding

CIHR awarded approximately $72 million in funding for health research in British Columbia in 2004-05, an increase of more than 167% from 2000-01. This funding supports more than 770 projects by principal investigators in eight universities or health research institutions.

Neuromed Product Began with CIHR

Vancouver: NeuroMed Technologies Inc. of Vancouver has hired three new executives to move its chronic pain drugs closer to market. NeuroMed, a spin-off from the University of British Columbia, focuses on discovering and developing small molecule drugs to treat neurological diseases, primarily pain and stroke. The science behind the company comes from CIHR-supported researcher Dr. Terry Snutch's investigations of the role of calcium channels in blocking pain. The company has raised $70 million in financing and recently hired three vice presidents to oversee clinical development, commercial development and medical research.

INTERNATIONAL

Studying the Health of Indigenous People

Photo courtesy of Health Canada

HIV/AIDS, mental health and Indigenous health workforces are the focus of three new global studies by researchers from Canada, Australia and New Zealand. CIHR's Institute of Aboriginal Peoples' Health is contributing $5.5 million to the projects, which will spend a total of about $12.3 million over five years.

New U.S. Ethics Code Could Have Impact in Canada

The introduction of stringent new conflict-of-interest guidelines for the U.S. National Institutes of Health could have ripple effects north of the border. CIHR President Dr. Alan Bernstein recently discussed the guidelines' potential impact for health researchers in this country, and the proactive steps Canada should take to ensure transparency and accountability. Full article online at: **www.cmaj.ca/cgi/content/full/173/4/353**

NATIONAL

Investment Will Accelerate Technology Transfer from Universities

CIHR, Science and Engineering Research Canada (NSERC) and the Social Sciences and Humanities Research Council have awarded $14.25 million through the Intellectual Property (IP) Mobilization program for 16 regional networks. As part of a network, universities, research hospitals and colleges will be able to better manage, protect, bundle and market IP. The networks will also provide companies with one-stop regional shops for academic research. The three agencies also awarded $2.87 million for six internship programs to address the shortage of tech transfer professionals in Canada.

Battling HIV/AIDS

Much of CIHR's support for HIV/AIDS research is funnelled through the Canadian HIV Trials Network (CTN), a partnership of researchers, practitioners, the private sector and people living with HIV/AIDS that facilitates clinical trials of the highest scientific and ethical standards. As of April 2005, the CTN had reviewed 208 trial protocols and implemented 89 clinical trials involving 8,448 volunteers at sites across Canada.

Strengthening Health Research

Statistics Canada reports that nearly one in every four dollars invested in health R&D was allocated to the health sector, up from less than 17% in 1999. Academic research, primarily supported by CIHR, was the single largest performer of health R&D, accounting for 60% of the 2004 total.

ALBERTA

Developing New Treatments for Severe Pain

Dr. Gerald Zamponi

Calgary: Dr. Gerald Zamponi's research into calcium channels could lead to new treatments for a variety of neurological problems, including the migraines that affect more than 3.5 million Canadians. The CIHR-funded neurobiologist at the University of Calgary works extensively in the area of drug discovery for novel treatments of pain and stroke as part of his involvement with Vancouver-based NeuroMed Technologies Inc.

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QUEBEC

Eradicating Cervical Cancer

Dr. Alex Ferenczy

Montreal: CIHR-funded researcher Dr. Alex Ferenczy of McGill University is an investigator on a clinical trial for a new vaccine that could help eradicate cervical cancer among women. The vaccine could receive regulatory approval within a year or two.

$2.2 Million for Obesity Research

Québec City: Quebec's international reputation for world-class obesity-related research has been further boosted with a $2.2 million investment in the Merck Frosst/CIHR Research Chair on Obesity at Laval University. In Canada, 23% of adults are considered to be obese, and more than 50% are overweight. The direct health costs of obesity, including hospital care, physician services and drugs, were estimated to be more than $1.8 billion in 1997, or 2.4% of total health care expenditures for all diseases in that year.

Cartilage-Building Gel Closer to Market

Laval: BioSyntech Inc. of Laval Quebec has raised $6 million for clinical trials of a new cartilage-building gel developed by CIHR-supported researcher Dr. Michael Buschmann and a group of scientists and engineers at École Polytechnique de Montréal. The team produced a gelling polymer called BST-CarGel®, that can help repair damaged tissue such as cartilage, bone and chronic wounds for people with injuries or osteoporosis. It would also avoid the need for invasive and costly joint replacement surgery.

MANITOBA

What Makes People Healthy?

Dr. Pat Martens

Winnipeg: Dr. Pat Martens at the Manitoba Centre for Health Policy is leading a five-year CIHR program called "The Need To Know Project". She is working with Manitoba's rural and northern regional health authorities, academics and planners to help decision makers address some of today's most difficult questions: What makes people healthy? How can we make the best use of our health care resources?

One study found that 5% of Manitobans taking prescription medications account for 41% of prescription drug spending. The findings from these studies will help health care providers and managers improve Manitoba's health care system.

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NOVA SCOTIA

Helping Rural Areas Deliver Better Health Care

Halifax: Health researchers at Dalhousie University are studying the quality of health services in Atlantic Canada. Dr. Renée Lyons is studying the health services in rural communities for people with chronic health problems. Dr. Patrick McGrath is leading a research program to help rural residents get access to primary health care for youth. And, Dr. Judith Guernsey is building a health research network and resource centre to understand what influences the health of Canadians living in rural areas.

PRINCE EDWARD ISLAND

Veterinary Science Helping Human Health

Dr. Cathy Chan

Charlottetown: Dr. Cathy Chan at the University of Prince Edward Island is identifying ways of preventing and reversing the damaging effects that fat can have on cells. Her ultimate goal is to prevent Type 2 diabetes. Dr. Chan and other health and nutrition experts are major contributors to a growing research base in nutrisciences across Atlantic Canada, with knowhow in veterinary and human medicine, agriculture, fisheries, food quality and safety.

CIHR's *Your Health Research Dollars at Work* is available to Members of Parliament, Senators and policymakers to communicate the benefits of the Government of Canada's investment in health research. News items can reproduced for use in householders and other communications materials. Visit CIHR's website to download this issue in electronic form: **www.cihr-irsc.gc.ca**

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NEWFOUNDLAND AND LABRADOR

Making Marine and Coastal Jobs Safer

St. John's: More than 60 academic researchers are working with some 40 community, government and industrial partners to study how to make marine and coastal occupations safer. CIHR-supported researchers, Dr. Stephen Bornstein and Dr. Barbara Neis from Memorial University of Newfoundland are leading the SafetyNet research program.

Upcoming Event

Tuesday, Nov. 22, 2005: 4th Annual Canadian Health Research Awards

National Gallery of Canada, Ottawa

NEW BRUNSWICK

Building Research Capacity at UNB

Fredericton: A CIHR program is building health research capacity at the University of New Brunswick. The CIHR Regional Partnerships Program was launched in 1996 to build capacity and establish research priorities and partnerships, and to build on local strengths in areas that were underfunded in health research. This program is successfully building health research capacity at the University of New Brunswick – a university that does not have a medical school. Lead researchers include: Dr. Marilyn Hodgins and Dr. Nicole Letourneau, Dr. Judith Wuest and Dr. Denise Clark.